# **BWC** Algorithms

- Lossy JPEG
  - 8-bit monochrome
  - 12-bit monochrome, pre/post
  - 24-bit color
- Lossless JPEG
- Hierarchical JPEG
- VQ Decompression



# **Lossy JPEG**

- 8-bit monochrome
  - MIL-STD-188-198
  - issue: Tables will not be added (other data types)
- 24-bit color
  - MIL-STD-188-198
  - no tables in STD, promised
  - CR to remove tables
- 12-bit monochrome
  - MIL-STD-188-198
  - no tables in STD, promised
  - CR to remove tables
  - pre- & post-processing RFCs on hold
  - resubmit as new ISO format APP6 markers

#### Recommended Tables

- no more defaults
- removes database version control issue
- no backward compatibility problems
- recommend tables via "Compression Guidelines"
  - » format?
  - » author?
- always place tables in stream



# Other JPEG Algorithms

- Lossless JPEG
  - Want ISO JPEG Profile
  - MIL-STD draft available
  - technically complete
  - ready for distribution
  - format will migrate from MIL-STD to ISO profile once defined

- Hierarchical JPEG
  - very preliminary draft
  - subset of the very extensive possibilities allowed in JPEG
    - » Extended sequential DCT only
  - need to discuss current user requirements at next
    BWCWG
  - Some technical issues as well for BWCWG
    - » Error confinement & restart markers
    - » Tables



### VQ

- Decompression Only
  - MIL-STD-188-199
  - no technical issues?



#### **Software Status**

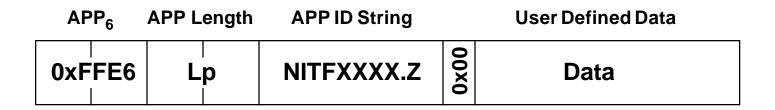
- 2.4i
  - lossy JPEG
    - » certified at JITC
  - available at TASC for distribution

- 3.0 β4
  - in process at JITC
    - » bugs found
    - » 3.0  $\beta$ 5 in preparation to fix bugs
    - » to be sent this week
  - lossy JPEG
  - lossless JPEG
    - » as per "profile"
  - VQ
  - hierarchical JPEG
    - » pending documentation
    - » to be addressed at next BWCWG



#### **New APPn Marker Format**

 Due to ISO issues regarding APPn marker registration, the following APPn marker format was created (at last NTB)



where: XXXX is a unique 4 digit number indicating the function of the APP marker.

Z is a letter indicating version of the APP marker (first version = A)

Note old APP<sub>6</sub> will remain unchanged

